

I claim:

- 1 1. A method of maintaining a communication link comprising the steps of:
 2 unregistering at a controller a dependent in communication with a master device
 3 using a communication channel on a frequency band $f_{\text{band}}(1)$; and
 4 transmitting a message to the dependent indicating to the dependent to register
 5 with a communications network using a frequency band $f_{\text{band}}(2)$.
- 1 2. The method of claim 1 comprising the additional steps of:
 2 receiving a registration message from the master device on the frequency band
 3 $f_{\text{band}}(1)$ indicating the dependent; and
 4 registering the dependent with the master device before the step of unregistering.
- 1 3. The method of claim 1 comprising the additional step of:
 2 transmitting another message indicating to the communications network to
 3 register the dependent with the communications network via the controller.
- 1 4. The method of claim 1, wherein the dependent is unregistered when an unregistration
 2 message is received.
- 1 5. The method of claim 1, wherein the dependent is unregistered when a strength of a signal
 2 transmitted between the dependent and the master device on the frequency band $f_{\text{band}}(1)$
 3 falls below a threshold value.
- 1 6. The method of claim 5 comprising the additional step of:
 2 monitoring a communication channel associated with the master device on the
 3 frequency band $f_{\text{band}}(1)$.
- 1 7. The method of claim 6, wherein the communication channel is defined by a frequency
 2 hopping sequence.
- 1 8. The method of claim 1, wherein the message is transmitted using a frequency band
 2 $f_{\text{band}}(2)$.

- 1 9. The method of claim 1 comprising the additional step of:
 2 transmitting a handoff message to the communications network indicating to the
 3 communications network to communicate directly with the dependent.
- 1 10. The method of claim 9, wherein the handoff message is transmitted on the frequency
 2 band $f_{\text{band}}(2)$.
- 1 11. A method for maintaining a communication link comprising the steps of:
 2 searching at a dependent for one or more frequency hopping sequences from a set
 3 of frequency hopping sequences;
 4 registering the dependent with a first master device when a first frequency
 5 hopping sequence is detected, the first frequency hopping sequence being associated with
 6 the first master device;
 7 monitoring for frequency hopping sequences in the set;
 8 registering the dependent with a second master device if the dependent detects a
 9 signal transmitted on a second frequency hopping sequence associated with the second
 10 master device having a higher signal strength than a signal transmitted on the first
 11 frequency hopping sequence.
- 1 12. The method of claim 11, wherein the step of registering the dependent with the first
 2 master device comprises the step of:
 3 transmitting a registration message to the first master device using the first
 4 frequency hopping sequence.
- 1 13. The method of claim 11, wherein the step of registering the dependent with the second
 2 master device comprises the step of:
 3 transmitting a registration message to the second master device using the second
 4 frequency hopping sequence.
- 1 14. The method of claim 11, wherein the set of frequency hopping sequences use a first
 2 frequency band $f_{\text{band}}(1)$.
- 1 15. The method of claim 14 comprising the additional step of:

2 searching for a signal transmitted using a second frequency band $f_{\text{band}}(2)$ if no
3 frequency hopping sequence in the set are detected.

1 16. The method of claim 15 comprising the additional step of:
2 registering with a communication network when the second frequency band
3 $f_{\text{band}}(2)$ is detected, the communications network being associated with the second
4 frequency band $f_{\text{band}}(2)$.

1 17. The method of claim 11 comprising the additional steps of:
2 receiving a registration message indicating the dependent to register with a
3 communications network; and
4 registering with the communication network using a second frequency band
5 $f_{\text{band}}(2)$.

1 18. A method for maintaining a communication link comprising the steps of:
2 receiving a first registration message at a master device from a dependent over a
3 first frequency hopping sequence associated with the master device;
4 transmitting a second registration message over a second frequency hopping
5 sequence associated with a second master device;
6 monitoring a strength at the master device for a signal transmitted by the
7 dependent over the first frequency hopping sequence; and
8 transmitting an unregistration message over the second frequency hopping
9 sequence if the strength of the signal transmitted over the first frequency hopping
10 sequence falls below a threshold value.

1 19. The method of claim 18, wherein the first and second frequency hopping sequences are
2 part of a set of frequency hopping sequences on a same frequency band.